

D.T1.3.1 WORK PAPER

Definition of criteria for the identification of central places (sub-nodes) in the region Version 1.0 02.2018





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The identification and classification of central places as sub-nodes are the main approaches to categorise access points to utility services and primary transport nodes in a wider network of places, connections and infrastructure (see SubNodes strategy). Central Places serve as main hubs according to their role in a hierarchical transport system. They play a crucial role in the provision of facilities, services and infrastructure for the people within a given area. The identification of central places is, therefore, one of the first steps within the spatial planning approach.

Following a discussion process among the project partners, a set of criteria were defined that must be met by a city to qualify as a sub-node. These criteria were complemented with indications to delineate the catchment area of a sub-node. The results of the discussion process are compiled in this work paper "Definition of criteria for the identification of central places (sub-nodes) in the region" (A.T1.3/D.T1.3.1).

Based on the following set of criteria, the project partners are able to identify sub-nodes within their regions and delineate the catchment area of an identified sub-node. A benchmarking (SWOT-analysis) is then able to reveal where actions can be most effective. In the steps to follow, each region applies the agreed criteria to define its sub-nodes and to delineate their catchment areas (A.T1.4/D.T1.4.1) - a template for a fact sheet as well as an example will be provided to support this activity. Each project partner is asked to set up and fill in the fact sheet for their medium-sized cities in order to identify or discard them as sub-nodes. The criteria are understood as generally mandatory, nevertheless, if a city does not meet one or more criteria but qualifies as a sub-node because of reasons or strategic considerations beyond the given criteria, an explanation and justification has to be given. This identification process then needs to be supplemented by a short SWOT analysis for each sub-node, followed by benchmarking in order to have a basis to prioritise needed actions.

As the SubNodes strategy emphasises, there are three perspectives, from which we are able to tackle the task of establishing sub-nodes as supplement hubs within the TEN-T:

- 1. The city as a hub in a wider network of villages and cities of the region and beyond.
- 2. The transport infrastructure within the sub-nodes, especially an existing train station and whether the station already qualifies as an intermodal hub for public passenger transport or needs particular modification to better fit the needs of the passenger.
- 3. The quality of the transport network and the reliability of public transport service, which connect the hinterland with a sub-node and the sub-node with the main TEN-T hubs.

Taking this place related aspects and transport related aspects of a sub-node into consideration, we are able to distinguish the criteria for the identification of central places in the region into exactly these two classes: a) node-related criteria and b) transport-related criteria (Fig. 1).



Fig. 1: The identification of central places as sub-nodes



Criteria for the identification of sub-nodes in the region

node related criteria of a sub-node	features/characteristics
is a regional administrative centre	 a regional administrative centre is a place where the central administration of a municipality is located; those cities are usually fulfilling central functions for the surrounding area the classification of the city in regional plans and/or development plans is an important indication for the identification of sub-nodes
offers working/shopping opportunities	 the facilities, services and infrastructure of central places are of vital importance for the supply of people within a given area - therefore, central places are capable to provide the necessary availability of job opportunities and services of general interest a sub-node has sufficient distinctive characteristics to be capable of serving as a local economic centre, with adequate working and shopping opportunities for the surrounding area
has a minimum size	 the particular significance of a city to serve as a sub-nodes comes into effect through a minimum <i>size</i> - in context of the sub-node project, the term <i>size</i> is used as a placeholder, which has to be specified by the project partners according to their local standards and criteria specific to their regions and spatial planning approaches number of inhabitants and population density might be criteria to determine the <i>size</i> of a city, the relational issue of the population's and density's minimum still needs to be defined within the given context of the region





has its own catchment-area	 × as an administrative and/or educational and/or economic centre of a region, it already has its own kind of catchment-area × this generic catchment area can serve as an indicator to delineate the catchment area of the identified sub-node
features the political will to be a sub-node	 × political institutions and political stakeholders are in charge of implementing measures in order to improve public transport services - a precondition to define a rural core town as a sub-node is to ensure a certain willingness to implement policy strategies to elaborate connectivity and accessibility
	 the political willingness of the stakeholder could possibly be expressed in local policies and within existing strategic spatial development frameworks for the region

transport related criteria of a sub- node	features/characteristics
is not part of the TEN-T core network	 if a node is part of the TEN-T core network, it serves already as a primary access point to the TEN-T and is unable to operate as a sub-node according to a hierarchical transport planning approach - therefore, a node which is already part of the TEN-T core network is not a sub-node in the strict sense, even if it is not qualified as the main hub exceptions are possible in justified cases - for example: the node is irregularly and/or sparsely served by the high-speed rail transport service on the TEN-T so that the majority of the passengers has to travel via the main hub by using local public transport
is directly linked via public transport to a TEN-T-hub	 reliable and direct connections to a main hub (without having to change train or bus) are mandatory to operate as a sub-node in an ideal situation, the connection is a railway link of high or at
	least sufficient quality and frequency
has sufficient distance from the main-node (30 - 60 min)	 × local public transport can be characterised as transport where the majority of the passengers generally travels not more than 50 kilometres and/or not longer than 60 minutes
	 x a sufficient distance between a sub-node and the main-node could be within 30 and 60 min travel time by public transport
	 the 30 minutes minimum shall serve as an indicator that the catchment areas of the sub-node and the TEN-T hub are not overlapping - so 30 minutes are not obligatory, exceptions are possible in justified cases
is a node of an existing public transport-network	 regional centres are usually the main destination within monocentric areas and therefore a primary node within the local public transport network system
	 a well working and efficient local public road and/or rail transport network empowers a regional centre as a sub-node in a wider transport network
	 a primary node within a local public transport network is usually equipped with the main bus station providing intermodal connectivity (bus-rail)



Indications (common criteria) to delineate a sub-nodes catchment area

indications to delineate catchment areas of identified sub-nodes	features/characteristics
district boundaries	 × district boundaries are an indicator for catchment areas because they encompass the district's dependent territory including a range of administrative subjects × district administrations are usually responsible for various tasks, including social welfare, state schools of secondary education or health care - areas of responsibility within the territory of a district are natively integrated and closely interrelated
commuter flows	 × the commuter flow pattern applies as an indicator for interrelations within a region × data about commuter patterns or home-to-work trips can be analysed to understand the flow of travel that has to be accommodated by the public transport system and network × information about the spatial orientation of trip flows indicate regional interrelations and therefore relations between a node and its catchment area
public transport lines and system network	 × the layout of a transport system connecting to the core city can serve as a criterion to define small and medium-sized towns as sub-nodes in a wider local and regional network within the urban-rural continuum × local public transport networks in monocentric areas are directed to the regional centre; the transport system and the operation network can, but must not necessarily be within the borders of the district × the extent, structure and directionality of the existing PT network can serve to define the catchment area of a node within a monocentric region - the extension in an area of an existing public transport network might illustrate the border of a catchment area